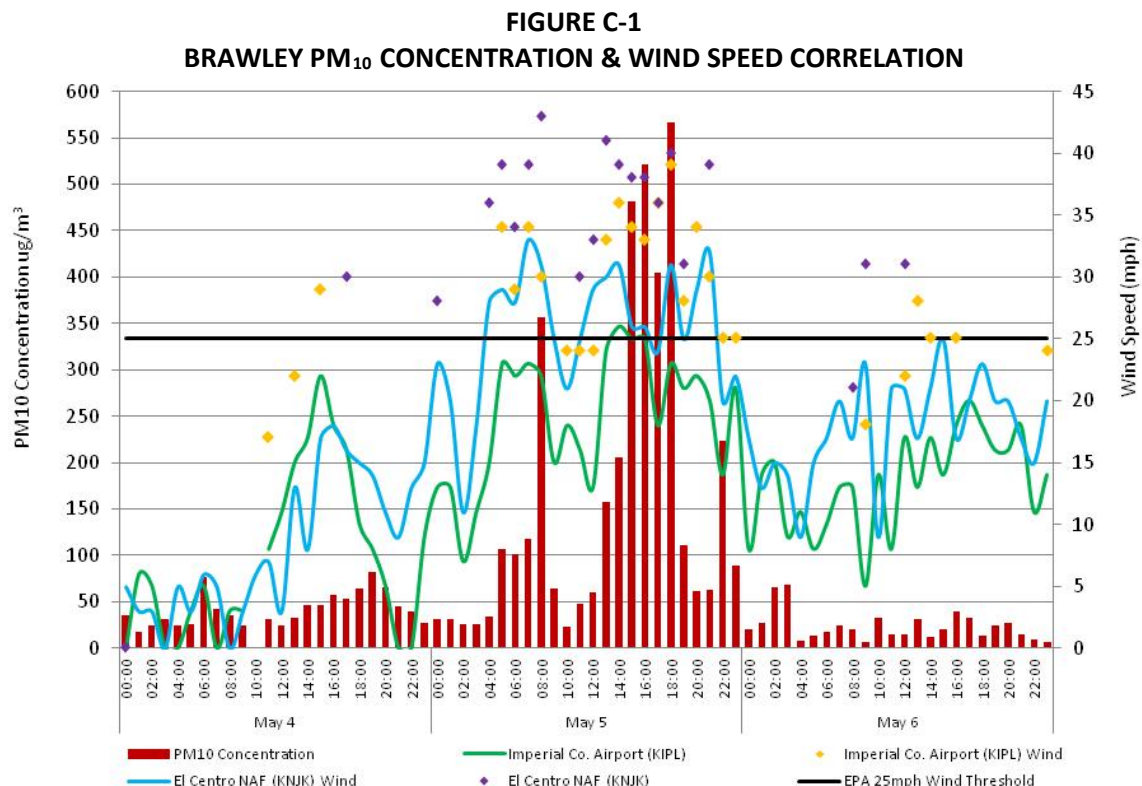


Appendix C

Correlated PM₁₀ Concentrations and Winds

The following graphs illustrate the direct correlation between wind speeds¹ and PM₁₀ concentrations at select monitoring sites within the Salton Sea Air Basin on May 5, 2016. Note a variety of instruments measure wind speed at different times during any given hour. Therefore, the following graphs reflect the hour of the wind measurement.

IMPERIAL COUNTY SITES (Figures C-1 to C-5)



Figs C-1: Brawley saw increased hourly concentrations in response to dust being transported downstream. Brawley does not record wind speed data. Air quality data from the EPA's AQS data bank. Wind data from the NCEI's QCLCD system.

¹ National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); <https://w1.weather.gov/glossary/index.php?letter=w>

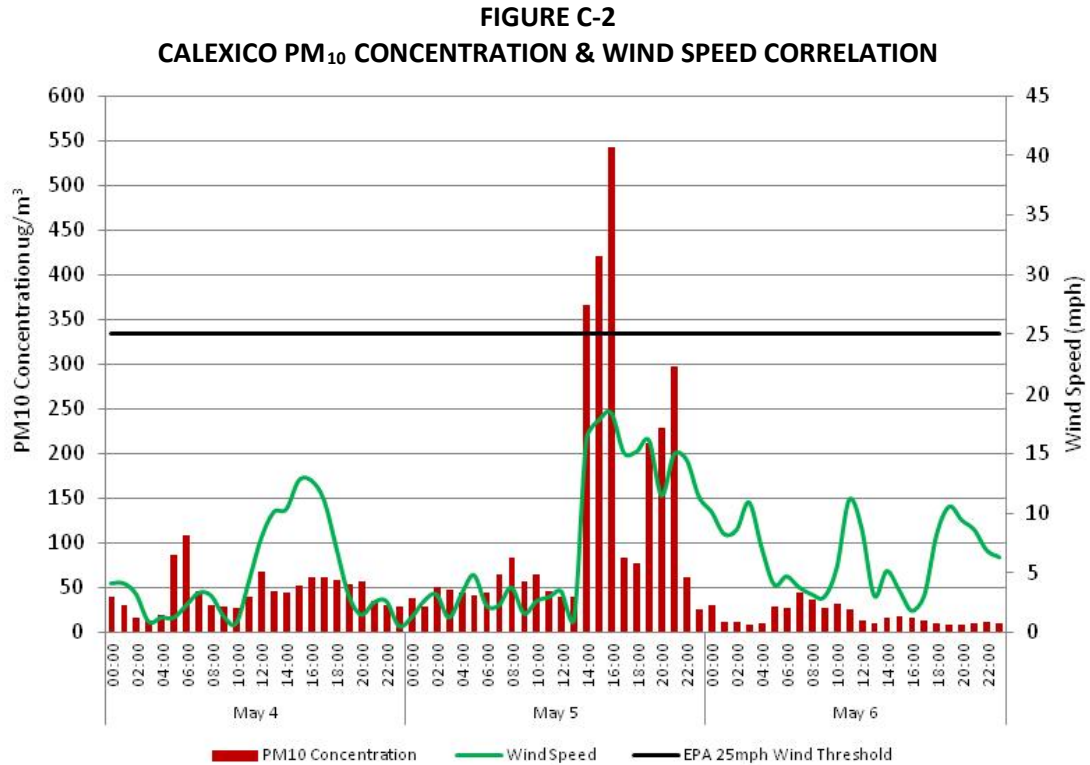


Fig. C-2: Winds at Calexico station did not reach the 25mph wind threshold. Air quality and wind data from the EPA's AQS data bank.

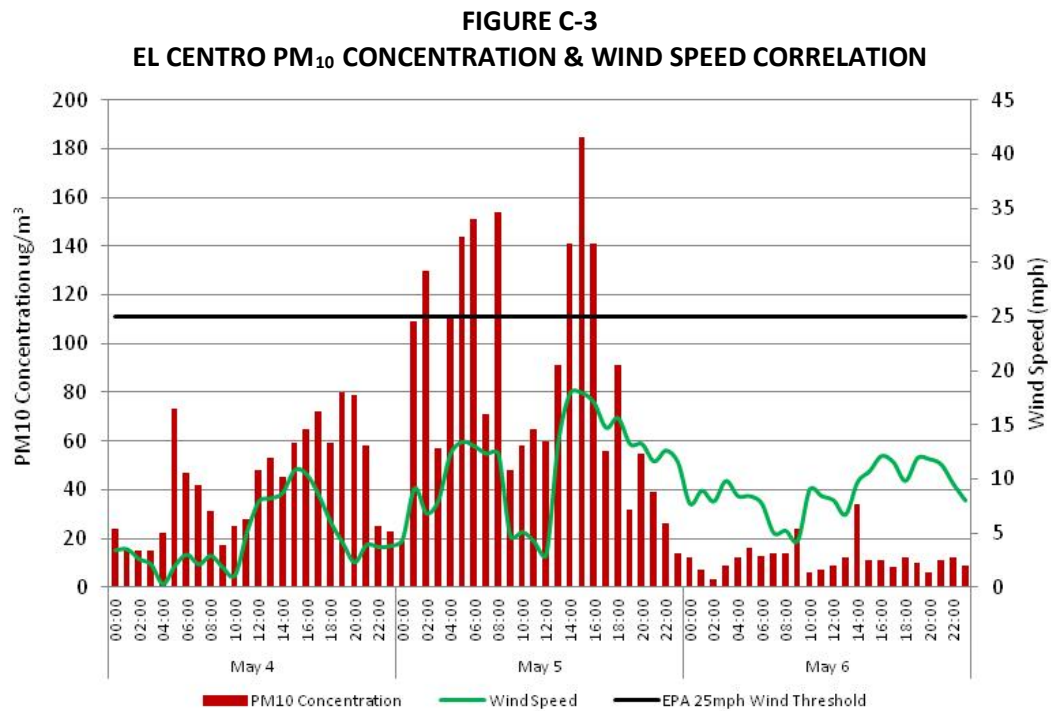


Fig. C-3: Winds at El Centro station did not reach the 25mph wind threshold. Air quality and wind data from the EPA's AQS data bank.

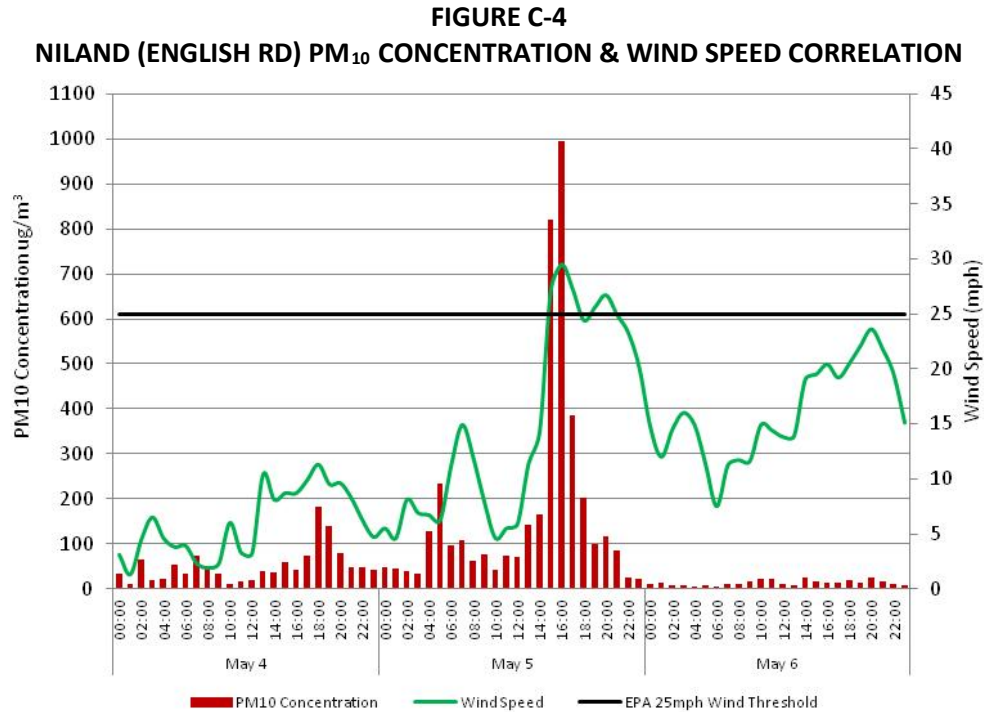


Fig. C-4: Winds at Niland station exceeded the 25mph wind threshold but the monitor narrowly escaped an exceedance. Air quality and wind data from the EPA's AQS data bank.

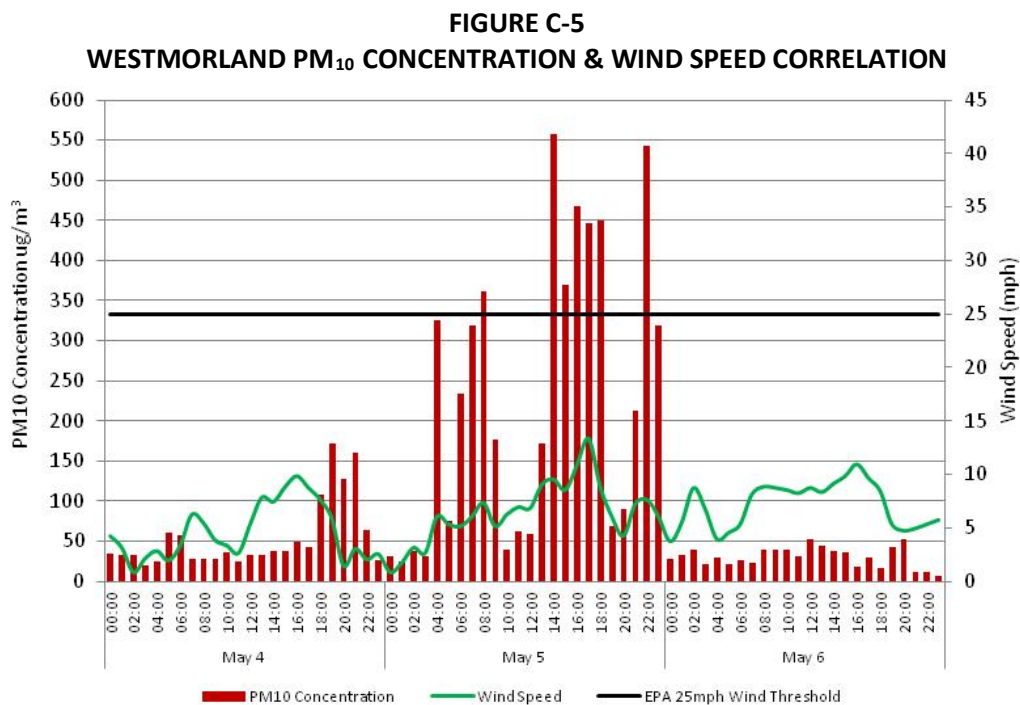


Fig. C-5: Winds at Westmorland station did not exceed the 25mph wind threshold. However, dust lofted by higher winds upstream settled out of the air as lower winds passed over the monitor. Air quality and wind data from the EPA's AQS data bank.

EASTERN RIVERSIDE COUNTY MONITORING SITES

FIGURE C-6

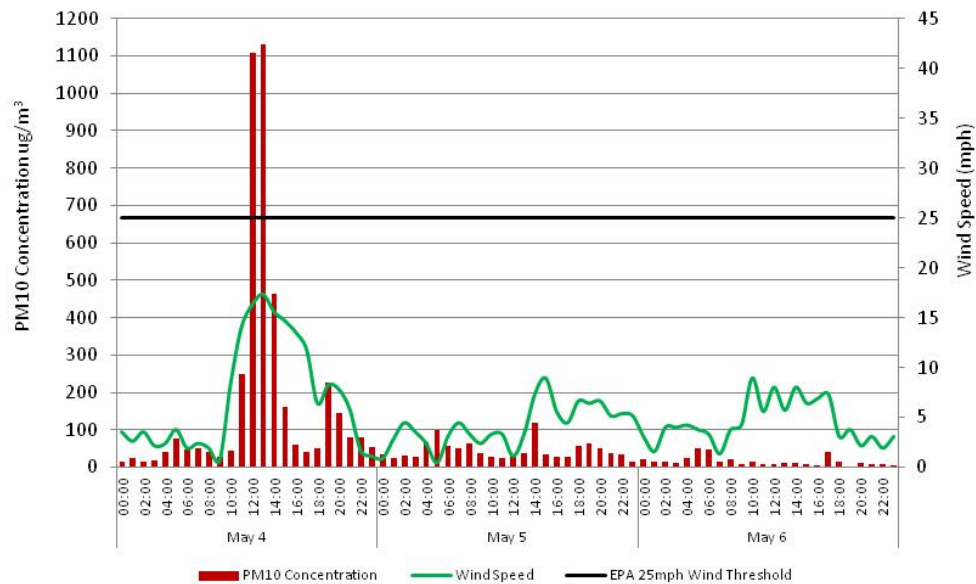
TORRES MARTINEZ DESERT CAHUILLA TRIBAL PM₁₀ CONCENTRATION & WIND SPEED CORRELATION

Fig. C-6: Winds at the Torres Martinez Desert Cahuilla Indians Reservation station did not exceed the 25mph wind threshold on May 5. Air quality and wind data from the EPA's AQS data bank.

FIGURE C-7

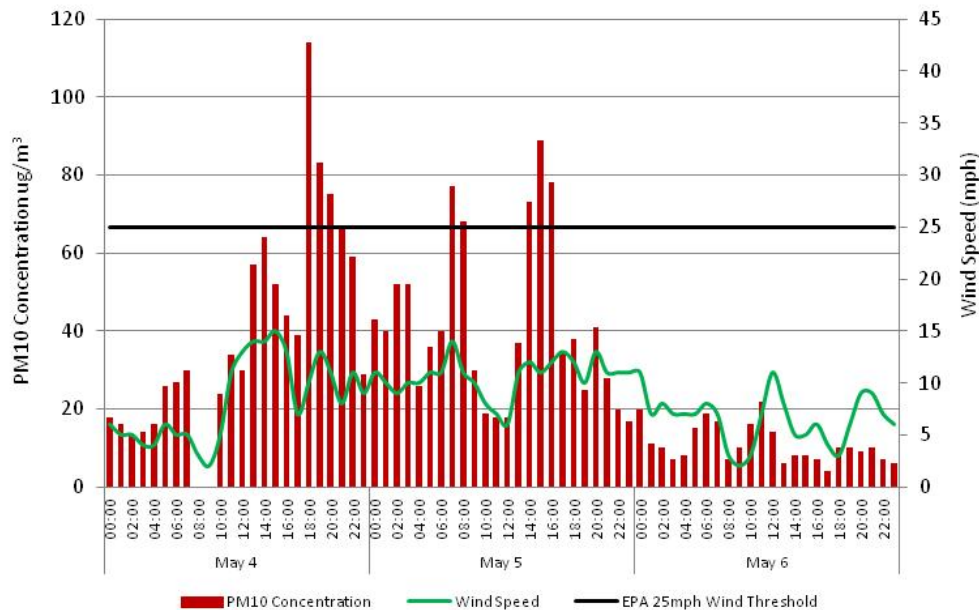
INDIO (JACKSON ST) PM₁₀ CONCENTRATION & WIND SPEED CORRELATION

Fig. C-7: Winds at the Indio (Jackson St) station did not exceed the 25mph wind threshold. However, the monitor still recorded elevated PM₁₀ levels. Air quality and wind data from the EPA's AQS data bank.

FIGURE C-8
PALM SPRINGS FIRE STATION PM₁₀ CONCENTRATION & WIND SPEED CORRELATION

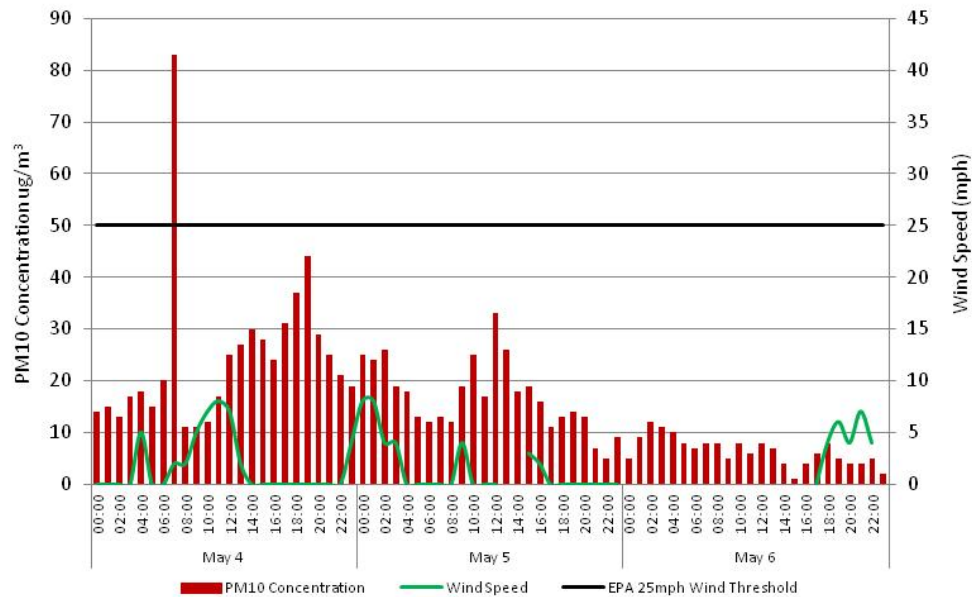


Fig. C-8: Winds at the Palm Springs Fire Station did not exceed the 25mph wind threshold. However, the monitor still recorded elevated PM₁₀ levels. Air quality and wind data from the EPA's AQS data bank.

SOUTHWESTERN ARIZONA

FIGURE C-9
YUMA, ARIZONA SUPERSITE PM₁₀ CONCENTRATION & WIND SPEED CORRELATION

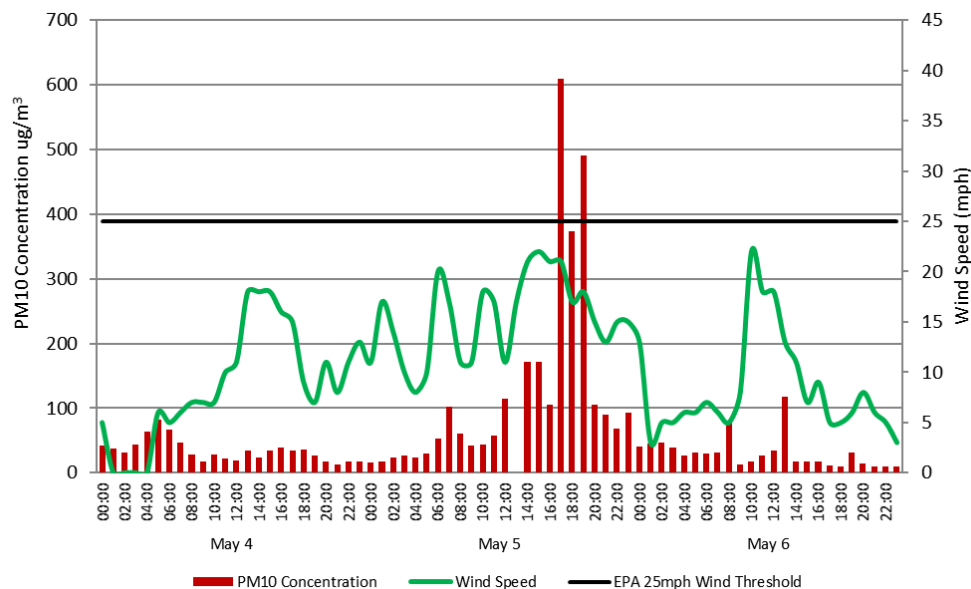


Fig. C-9: Yuma Supersite saw a brief rise in PM₁₀ concentrations in response to an increase in winds on May 5. Air quality data from the EPA's AQS data bank; wind data from the NCEI's QCLCD system.